



Final Programmatic Environmental Assessment
on Allowable Adjacent Landowner Activities
Incorporating Ecosystem Management Practices
on Federal Lands at Grapevine and Lewisville Lakes, Texas



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Executive Summary

Modifying guidelines that establish allowable mowing, underbrushing and pedestrian access path activities on Federal lands is considered an *action* as defined by the National Environmental Policy Act, and this programmatic environmental assessment documents potential environmental impacts associated with a range of allowable mowing, underbrushing and access path activities by adjacent landowners on Federal lands. Multiple approaches were considered to meet the U.S. Army Corps of Engineers' (USACE) underlying need of managing and conserving natural resources while providing quality public outdoor recreation experiences for present and future generations. USACE's management and conservation practices seek to: (1) provide for long term public access to, and use of, natural resources in cooperation with other Federal, State and local agencies, as well as the private sector; and (2) to manage and conserve fish; wildlife; forests; wetlands; grasslands; soil; air; and water resources.

This programmatic environmental assessment examined the environmental consequences of seven alternative guidelines for adjacent landowner mowing and/or underbrushing activities on Federal lands at Grapevine and Lewisville Lakes. An analysis of direct, indirect and cumulative effects of these alternatives lead USACE to select a set of guidelines referred to as the "Narrow Shoreline Variance" alternative as the preferred alternative. Summarizing:

- This alternative would continue to allow adjacent landowners to apply for a permit for mowing and/or underbrushing for a 25-foot wide zone at Grapevine Lake and a 50-foot wide zone at Lewisville Lake, which is what the current guidelines allow.
- Additionally, however, in those areas along the shoreline where there is not enough width between the allowable mowing/underbrushing zone and the conservation pool elevation to provide adequate habitat or water quality protection buffers, the adjacent land owner could apply for a variance to the mowing/underbrushing permit that would allow additional mowing and underbrushing all the way to the conservation pool. For both Grapevine and Lewisville Lake, USACE has determined that at least 50 feet beyond the current mowing/underbrushing zone is needed to provide adequate habitat or water quality protection buffers. These narrow shoreline variances would impose certain ecosystem based vegetation management requirements on the adjacent landowners to offset the adverse habitat impacts that might occur. Geographic Information System (GIS) analysis indicate that approximately 158 acres would be added to the 1,782 acres that currently fall within the allowable mowing/underbrushing zone at the two lakes under this alternative.
- In those areas beyond the mowing/underbrushing zone that are not considered "narrow shorelines", a zone referred to as the habitat zone in this programmatic environmental assessment, USACE has developed guidelines for ecosystem based vegetation management prescriptions that community groups, lead by a certified master naturalist, could implement with a permit issued by USACE. GIS analysis indicates that there are approximately 24,255 acres in the habitat zone under this alternative. If the entire habitat zone has these ecosystem based prescriptions implemented, approximately 3,800 additional habitat units (defined in Chapter 3) would be available to wildlife beyond the existing 14,622 habitat units currently available to wildlife at the two lakes.
- Permits for access paths between the Federal property line and the shoreline can be issued to individual adjacent landowners, or to groups of adjacent landowners seeking a single path to be used by all in the group. Group-use or community access paths would be favored over individual access paths.

The potential adverse environmental consequences of the preferred alternative include minor (not significant) increases in sheet and rill erosion, non-point pollution, potential to encounter wetlands in the mowing/underbrushing zone, air emissions, noise and intense recreational activities on lands designated for low density recreational or habitat use. Additionally, minor (not significant) decreases in floral and faunal diversity are expected. Finally, significant beneficial habitat quality effects are potentially available to wildlife if the ecosystem based vegetation management prescriptions are fully implemented at the two lakes. No significant cumulative effects are expected under this alternative.